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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,678	01/16/2004	B. Raghav Reddy	HES 2003-IP-011937U1	8611
28857	7590	06/27/2006	EXAMINER	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			MARCANTONI, PAUL D	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/759,678

Applicant(s)

REDDY ET AL.

Examiner

Paul Marcantoni

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The applicants' 5/4/06 response has been considered but is not persuasive.

Response to 11/9/05 Restriction:

Applicant's election with traverse of Group I, claims 1-39, in the reply filed on 12/9/05 is acknowledged. The traversal is on the ground(s) that the examiner has not made a compelling reason under MPEP 808.02 and the timing of the restriction is improper. This is not found persuasive because MPEP 811 states with respect to timing that while a restriction requirement is normally made before any action on the merits, it may be made at *any time before final rejection*. It also states that it should be made as soon as possible when that need develops. Applicants' amendment to changing their invention from simply a method of cementing and placing in a subterranean formation (applicants thus implying that they are cementing a *wellbore* which is the crux of their invention-see paragraph [0002] on page 1 of applicants' specification) resulted in the need for a restriction requirement.

The applicants state the examiner has not made a compelling reason under MPEP 808.02. The examiner has shown that the inventions of Groups I and II have separate classifications (class 166 and class 106 respectively) and thus different fields of search. The search of either Group I does not require a search in Group II and vice versa. The examiner has met the serious burden requirement also by his proper holding for this restriction which has not been traversed by applicants in their response. The requirement is still deemed proper and is therefore made FINAL.

Obviousness-Type Double Patenting:

Claims 1-39 remain rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-13 of US Patent No. 6,796,378 B2 (Reddy et al.). Reddy et al. teach applying his cement composition comprising cationic polymer (cationic derivatized starch), calcium aluminate, water, and retarder (col.2, line 46) for a well cement.

The applicants' submitted terminal disclaimer appears to be approved. However, the examiner has maintained his rejection because applicants indicated they requested to withdraw their submitted terminal disclaimer. The applicants indicated they requested to withdraw the previously filed Terminal Disclaimer as stated on page 21, second to last paragraph of applicants' response. The applicants should note that they have to *petition to withdraw a terminal disclaimer* that has already been approved.

Applicants can still choose to change their minds and permit the submitted terminal disclaimer to overcome this rejection.

35 USC 112 Second Paragraph:

Claims 1-39 are rejected under the second paragraph of 35 USC for failing to particularly point out and distinctly claim applicants' invention.

Claim 1 remains vague and indefinite because the cement composition cannot be activated without water. Water is the ingredient that starts the hydraulic reaction with cement and without water there is no activating any cement composition. Applicants may consider insertion of claim 2 (water) into claim 1.

The terms "high" density particles are definite term in claim 7. The applicants define this term on page 20 of their specification as meaning *particles that are heavier than the settable fluid to which the particles are to be added*.

The terms "desired" listed twice in claim 14 is indefinite as it is in claim 25 and any other claim it is utilized.

35 USC 102/103 Rejection

Claims 1-39 are rejected under 35 U.S.C. 102(a and b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Laramay et al.* '318, *Abelleira et al.* '147 B1, *Yamashita et al.* '418, *Cowan* '711 or '654 or '070, Vijayendran et al. '832 B1, Nadolsky et al. '603, Smith et al. '939, Booth '407, Lu et al. (CN 1385388), JP 2000191350 (Tobori et al.), JP 09020536 (Tamura et al.), Mizunuma et al. (JP 06128001), Koizumi (JP 05043293), Yamaguchi et al. (JP 61256956), JP 59109663 (Takenaka Komuten Co), or Borchardt (DE 3213799) alone or in view of Vijn et al. '488 or Chatterji et al. '203

All of the primary references above teach a method of cementing a subterranean formation including using a particle size distribution adjusting agent as stated in the first non-final office action on the merits. Not all of the primary references teach a retarder however. Yet, a retarder is notoriously known for slowing the setting of cement and is a conventional additive used in the art for both construction purposes and well cementing. Vijn et al. '488 teach on column 4 lines 24-35 that the addition of a retarder to a well cement is old in the art. Chatterji et al. '203 also teach the use of a retarder for well cements are known in the art (see claim 1). Thus, the use of a retarder to slow setting

even in well cements or subterranean formations (of which a well cement is) would have been an obvious design choice for one of ordinary skill in the art.

Previous Response

First, the examiner regrets any misunderstandings regarding previously rejected claims under 35 USC 112 second paragraph. Previous rejections not mentioned were withdrawn as a result of applicants' arguments/comments. Only remaining rejections were stated in the office action.

The applicants argue for all references in the 102/103 rejection that none of the prior art teaches activation of a cement composition. In rebuttal, the examiner disagrees. Water is the activating agent for a cement composition and all cement compositions must contain water to activate the hydraulic properties and lead to a settable material. All of the prior art references teach adding water to their cement composition and thus teach "activating" their cement composition. Applicants are referred to their own independent claim 1 which contains no activating agent because there is no mention of water in claim 1. A cement composition cannot be activated without water.

The applicants also argue references that teach wall board cement compositions and note that they do not teach placement in a subterranean formation. The examiner disagrees and notes that wallboard such as gypsum wallboard is likely placed in a subterranean formation on a daily basis in the construction industry. Drywall or gypsum wallboard is often used to create a finished basement for homeowners. A basement is a subterranean formation as it is sub (below) the terra (earth or ground level).

It would appear that applicants arguments to "subterranean formation" are implying *cementing a wellbore* which is a subterranean formation. This is the whole purpose of applicants' process as it is directed to a wellbore (See paragraph [002] of applicants' specification). However, the applicants cannot imply or argue something they do not claim because they are not claiming a wellbore so any subterranean formation including basements, wall foundations, etc. read upon the presently claimed invention. They would not had applicants amended their claim to method of cementing a wellbore but this limitation is not in the claim. This is not a suggestion but merely an observation of what applicants appear to argue (for their limitation) yet is not actually in the claim. It is also noted that cement/concrete is notoriously known in the art for use in a subterranean formation whether its for reinforcement of a post or fence, for example, or part of a foundation for a building or a house. This applies to all references that use a cement material or concrete because it is understood that these materials are conventionally used in subterranean formations. Note that many of these references do not teach a *wellbore* so they would not meet the limitations had applicants actually had this term in their independent claim 1 and would have to be withdrawn. Only references that do or potentially read upon a wellbore would remain. Still, this term is not in the claim so they have not been withdrawn. Again, this is not a suggestion but an observation of the present state of applicants' claims.

With respect to the Booth reference which teaches a process for backfilling mines, Booth does teach adding a cationic polymer (particle size distribution adjusting agent) and water (activating agent for cement). The applicants argue that Booth does

not teach adding a retarder. Yet, a retarder is a conventional additive to virtually any cement composition and the addition of a retarder would have been an obvious design choice for one of ordinary skill in the art.

The term "particle size distribution adjusting agent" has also been given its broadest possible meaning. While the applicants mean a cationic polymer, they are not actually claiming that in claim 1 and it is improper to read the limitations of their specification or dependent claims (teaching cationic polymer) into claim 1. Therefore, this term can also be interpreted to mean a substance such as water, a thickener, a dispersant or surfactant, etc. or any substance that can potentially have an effect on particle size distribution. Each one of these conventional additives as well as potentially others not mentioned can adjust particle size distribution. Applicants may again consider at the very least the insertion of cationic polymer into claim 1 to avoid these broad but permissible interpretations of a particle size distribution adjusting agent. Finally, It is the examiner's position that he has addressed applicants' arguments fully as stated above.

Examiner's Response to 5/4/06 Remarks by Applicants:

Terminal Disclaimer:

Applicants state they have submitted a petition to withdraw the terminal disclaimer in this response. However, there was no record in the electronic prosecution history in this response of any submitted petition to remove the terminal disclaimer. Applicants may consider re-submitting this petition for consideration by the examiner.



The applicants also argue Reddy does not apply under ODP rejection because he does not teach activating the cement composition. In rebuttal, applicants do not particularly point out and distinctly claim exactly what they mean or how they activate their cement. The cement becomes "activated" by adding water which makes the cement hydraulic and allows for setting. Note applicants do not even have water which is required to activate their cement in claim 1. Applicants are also not claiming a slurry and cannot argue a feature not claimed. Further, Reddy teaches a cationic polymer which can also potentially "activate" the cement. The applicants also present a chart on page 7 of their response which teaches percent water. However, a review of their own claim 1 indicates there is not even the presence of water so applicants cannot argue features (ie water) not even claimed. The examiner does not need to provide evidence that water is an activator. Water is notoriously known as the activator to make cement hydraulic and allow for it to set into a hardened mass. The applicants are respectfully invited to provide evidence themselves that they can make a cement mass harden without water.

The examiner indicated in his first office action water is required in claim 1 yet applicants maintain they do not need water to make cement! The examiner again respectfully invites applicants to make a cement hardened mass without water. The indefiniteness remains as a result of applicants refusal to add water as a component in claim 1.

The examiner has not held "particle size distribution adjusting agent" as ~~broad~~ <sup>indefinite</sup> but notes it can read on a variety of different components other than the one applicants

mean to claim (but do not---cationic polymer) for their invention especially with respect to claim 1.

The term "desired" remains indefinite for the same reason that the term "predetermined" is indefinite. It is a vague and indefinite term and applicants again refuse to delete this vague word.

The applicants have requested "evidentiary support" from the examiner and that he is allegedly relying upon common knowledge or well known principles. In rebuttal, applicants do have their evidentiary support and that can be found in the references the examiner used in his rejection. It is true also that it is common knowledge that it is notoriously known in the art to add a retarder to any cement to delay setting. That would have been an obvious design choice for one of ordinary skill in the art. The examiner does not rely on so called common knowledge either because he has presented the applicants with a reference teaching the addition of retarders to cement (ie evidentiary support).

The applicants also allege their invention is directed to subterranean formations from which "hydrocarbons" are removed. It appears in other words applicants have not yet claimed an oil well cement by their use of the word hydrocarbon but it appears applicants mean oil wells by this term. Yet, as applicants are aware, there is no statement of the intended use (hydrocarbon (oil?) removal from a subterranean formation (well)) so non-analogous art can still read upon the "claimed" invention. The applicants cannot read the limitations of their specification into the claims and the examiner can examine claims such as claim 1 and given its broadest possible meaning.

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Applicant cannot read a method of cementing a well because they do not claim it. This is not a suggestion but only a rebuttal to applicants' remarks.

The applicants also appear to argue in their opinion that there is "no realistic need for a retarder" in the Booth cement composition. In rebuttal, the applicants make a conclusion without any evidentiary support. How can applicants be sure Booth also would not potentially wish to delay the setting of a cement by the addition of a retarder? One of ordinary skill in the art would have understood that the addition of a retarder to delay setting would have been an obvious design choice for one of ordinary skill in the art. The finality of this office action is now proper.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni  
Primary Examiner  
Art Unit 1755